$L_{max}$ (mm) < 200/(PxD); and

a minimum length, $L_{min,}$ of the contacting portion is defined as:

$L_{min}$ (mm) > 0.8/ ($D^2$x $\pi$) or

$L_{min}$ (mm) > 0.7 whichever is longer,

where D is the diameter (mm) of the corresponding electrode of said pair of electrodes and P is the power (W) supplied to the corresponding electrode of said pair of electrodes.

2. (Amended) A high pressure discharge lamp according to claim 1, wherein said conductive element comprises molybdenum foils.

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6. (Amended) A high pressure discharge lamp, comprising:

a quartz glass bulb;

conductive elements, said conductive elements being airtightly sealed at sealing portions of said quartz glass bulb; and

a pair of electrodes, each electrode of said pair of electrodes being disposed so as to be opposite the other and each of said electrodes being connected to one of said conductive elements,

wherein $R_{max}$ of a contacting portion of each of said electrodes is about 5μm or less, wherein $R_{max}$ is a maximum of an absolute value of a difference between a distance from an axial center of each of said electrodes to a particular point on a surface of each of said electrodes and a mean value of the distance.

7. (Amended) A high pressure discharge lamp according to claim 6, wherein conductive elements

comprises molybdenum foils.

8. (Amended) A high pressure discharge lamp according to claim 6, wherein

the length of said contacting portion of each of said electrodes is in the range between about P/150 and P/100 mm from an end of each of said electrodes along the length of each of said electrodes, where P is a supplied power to said high pressure discharge lamp in watts.

Cont'd 4

9. (Amended) A high pressure discharge lamp according to claim 6, wherein the maximum value of the surface roughness of the contacting portion of each of said electrodes is about 3μm or less.

10. (Amended) A high pressure discharge lamp according to claim 6, wherein the maximum value of the surface roughness of the contacting portion of each of said electrodes is about 1μm or less.

11. (Amended) A high pressure discharge lamp according to claim 6, wherein the maximum value of the surface roughness of the contacting portion of each of said electrodes is about 0.5μm or less.

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Cont'd 5

19. (Amended) A high pressure discharge lamp according to claim 6, wherein the contacting portion of each of said electrodes has a surface, said surface being polished by a composite electrolytic polishing method.

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**Please add the following new claims:**

--20. (New) The high pressure discharge lamp according to claim 1, wherein said contacting portion covers a distance L from the sealing portion to the end of the electrode, said end of said electrode terminating inside and beyond the edge of a foil.

21. (New) The high pressure discharge lamp according to claim 1, wherein said power is in a range between 120-200 W.

22. (New) The high pressure discharge lamp according to claim 1, wherein said high pressure discharge lamp comprises an internal pressure of at least 8MPa.

23. (New) The high pressure discharge lamp according to claim 1, wherein said diameter of said each electrode is between 0.4 - 0.8 mm.

24. (New) The high pressure discharge lamp according to claim 1, wherein a distance between said each electrode is 1.0 - 2.0 mm.

25. (New) The high pressure discharge lamp according to claim 6, wherein said contacting portion is formed by a part of each electrode of said pair of electrodes and said quartz glass bulb.

26. (New) The high pressure discharge lamp according to claim 6, wherein said contacting portion covers a distance from the sealing portion to the end of the electrode, said end of said electrode terminating inside and beyond the edge of a foil.